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RESPONSE

A Report on Actions for A Better Environment

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RESPONSE is a periodic report from the United States Department of Agriculture on USDA's many areas of action to remedy environmental problems. Department programs protect and improve the environment through research, forestry, conservation and a wide range of rural and community services.

NEW CROPS RESIST DISEASES- PESTS

Cooperating with State agricultural experiment stations across the country the USDA assists in the development of new and better varieties of crops. In May new varieties announced included: Desertgold peach; Atlas and Apollo strawberries; B70 inbred corn; Shortana hard spring wheat; Centurk hard red winter wheat; Scoutland HRW wheat; Eagle HRW wheat; Bolal HRW wheat; Peak semidwarf hard red spring wheat; Twin semidwarf soft white spring wheat; Paha soft white winter wheat; and Luke soft white common winter wheat. Also new germ plasms (basic materials needed to develop improved varieties) were released to plant breeders. They included two new germ plasms for cotton, two for alfalfa, and nine for corn. Seed for the new crop varieties will not be commercially available for at least a year and new plants will take longer to reach the commercial market. New crop varieties provide new characteristics important to consumers, farmers, and processors. In their development, biological control of crop diseases and pests (via genetic resistance) is given particular emphasis. Details on the characteristics of the new varieties and germ plasms are available upon request to the editor. (ARS-CSRS)

ATTACK ON ISLAND SCREWORMS

The war on destructive (to livestock) screwworms, the most successful biological war ever waged against a pest, was carried to the Virgin Islands and Puerto Rico on June 1. The key thrust is the aerial release of large numbers of laboratory-reared sterile screwworm flies (2 million a week) to mate with the fertile native population of flies. Result--the eggs do not hatch and the pest is eventually eradicated. (ARS)

MORE WATER,
SEWER AND
DISPOSAL
SERVICE

The rural water and waste disposal facilities program received a boost in May as Farmers Home loan and grant authority was increased from \$160 million to \$260 million for this (1971) fiscal year. The increase is enough for 500 additional water, sewer, and solid waste disposal projects in rural communities. Furthermore the loan budget for fiscal 1972 was raised from \$189 million to \$300 million. USDA loans and grants have been producing about 900 rural systems a year and help small communities ranging from coverage of a few farms to towns and whole sections of countryside. These new systems are especially helpful in eliminating open streams of sewage and the use of contaminated, drought-endangered wells. (FHA)

SHE WAS A
GYPSY WOMAN

At least that's what the male gypsy moth will think when he encounters a synthetic sex attractant intended to confuse and mislead the destructive pest so he cannot find female moths with which to breed. In tests last April the sex attractant, disparlure, showed promise. And it is undergoing extensive testing throughout this gypsy moth season. Disparlure is already useful in detecting the moth and the extent of its infestations of forest areas. Last summer the moths defoliated almost 800,000 acres of woodlands in eight Northeastern States. It takes from one to several defoliations to kill a wide variety of trees, increasing fire hazards, water runoff, and general depreciation of forested lands. Currently the nonpersistent pesticide carbaryl is the main weapon used against the gypsy moth. Low in toxicity to birds, fish, wildlife, and humans, it likely will remain a primary control against the moth in the immediate future. (ARS)

NEW ENVIRON-
MENTAL
REPORT

Protecting land, water, and waterways; management of farm wastes; recycling food processing wastes; and alternative to pesticides--these are the major areas treated in the recently released Ag. Research report: "Managing Our Environment" (a report on ways agricultural research fights pollution). Single copies of this 48 pager are available from the editor upon request. (ARS)

ZECTRAN
APPROVED

Zectran, the most environmentally tested and monitored pesticide ever to be used in forestry was recently approved for registration by the Environmental Protection Agency. The highly selective, non-persistent chemical is a major substitute for DDT in controlling the spruce budworm and the jack pine budworm. Both have caused extensive environmental and ecological damage to forests in North America, especially in Montana, Idaho, and Maine. Zectran is 20 to 25 times more toxic to budworms than is DDT but breaks down into harmless elements in less than two days after application. It is also effective when integrated with biological controls. The success of Zectran may lead to testing it for use against other serious defoliators, including the gypsy moth, currently reaching epidemic population size in the Northeast. Single copies of the environmental impact report made to the President's Council on Environmental Quality on Zectran are available upon request to the editor. (FS-ARS)

REPORT--
BIBLIOGRAPHY
AVAILABLE

The Quest for Environmental Quality: Federal and State Action, 1969-70 with Annotated Bibliography is available (for 35 cents) from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. Produced by the Advisory Commission on Intergovernmental Relations, it reports briefly on governmental actions during the environmentally active 1969-70 period.

CUTTING
GRASS FOR
CHICKEN FEED

Operators of big lawns, from golf courses to turf farms, have long wondered what to do with their clippings (sometimes accumulating 20 to 30 tons a day). Ag. Research scientists of Albany, California, may have found one answer. They determined optimum conditions under which clippings could be dried with minimum nutrient loss. Result--clippings have considerable potential as a poultry feed ingredient. One turf company is already using clippings in this way and getting income from what recently was just a waste disposal problem. Scientists from the same laboratories found a way to recover protein from water discharged during starch and gluten production. Recovered is wheat flower which, when left in the water, increases oxygen demands on streams to cause pollution. Now being tested by commercial millers the process shows promise. (ARS)

BETTER SEED
TREATMENT
CONTROL?

A new test to measure the amount of fungicide on seeds may provide closer control of seed treatments by seedsmen. Specifically it indicates if the widely-used fungicide, captan, is adequately applied to a sample of seed. The quick inexpensive test will be useful to seed-testing agencies and seed firms in determining whether too little or too much fungicide is being applied. This is good from both an environmental and an economic standpoint. (ARS)

STEMMING THE
POT WEED

In an effort to eliminate the growth of marijuana (wild hemp) on non-crop areas where it frequently grows, USDA and Justice Department are cooperating with farmers on two pilot programs. One is cost sharing the expense of eliminating the weed with farmers; the other is a direct money supplement to an existing weed control program. Eleven counties in ten States are involved in the May-July projects. (ES-ASCS)

CARIBFLY
PICTURE
STORY

The picture story (No. 235) titled, "Caribfly: Pest Control Plus Environmental Protection," is available upon request to the editor (single copies). Useful to picture-illustrated publications, the story offers a six-picture feature on Caribfly control measures now going on in the Key West area of Florida. The control effort, in which sterile flies are periodically released to breed with the Caribfly population of the area, began last December and will continue for 6 months or until the Key West infestation is eradicated. The project requires one million Caribflies reared, sterilized, and aerielly released each week. Although Florida's current Caribfly infestation is more than 5 years old it threatened to spread to large commercial crops and other areas of the country. (ARS)

THE QUICK
STING BEE
IS COMING
- MAYBE

The American Beekeeping Federation passed a resolution at their convention in Ohio this year expressing concern for domestic beekeeping if the African honeybee, *apis mellifera adansonii*, should spread to the United States. Now in Brazil (where it has spread rapidly since 1956 over an area equal to the continental United States) the bee looks like our domestic bees. Many microscopic differences exist, however, and more importantly, so do behavioral differences which make them vastly different. They live in a constant state of aggravation; reproduce and spread rapidly; replace existing bee colonies wherever they go; can adapt to many situations, climates and countries (including the United States which they show signs of migrating towards from South America); and will attack man and animals when swarms collide with them or at other times on little (usually no) provocation. Precautions must be extreme if they are near populated places or domestic animals. The Federation's resolution requested USDA to make available funds to determine the significance and extent of the African bee problem in South America, what action might be taken to prevent the spread of this bee into Central and North America, and how to cope with the bee if it does reach the United States. Some \$40,000 was earmarked from the ARS contingency funds to initiate the study. Experienced beekeepers will be among those conducting the study.

ENVIRONMENTAL
IMPACT
STATEMENTS

Environmental impact statements review proposed individual federal actions that would have an impact on the environment. The Council on Environmental Quality publishes the 102 Monitor which lists all such statements now filed (in draft or in final form) with the Council. The Monitor does not include any of the detailed evaluations and assessments of the actions as they are presented in the statements themselves. It does note appropriate government contacts. Heavy demand for this publication possibly limits its distribution to subscribers with a working need for such information. Inquiries concerning its distribution may be made to its editor: Gay Boyer, Council on Environmental Quality, 722 Jackson Place, N. W., Washington, D. C. 20006.

SOILS--AN
ECOLOGICAL
RESOURCE

Using Soils as Ecological Resources is the theme of a 50-slide series developed by Cornell University. The narrative guide tells how soils information can be useful in some environmental improvement efforts. The slide set (for \$7.00) is available from the Visual Communications Section, Department of Communication Arts, Roberts Hall, Cornell University, Ithaca, New York 14850.

GRANTS TO
STATE
RESEARCH

Research grants totaling \$1.7 million were made in late May to agricultural scientists in 17 States. Primarily they will support research for better methods of pest control to achieve more efficient production of major crops and to maintain environmental quality. The grants were awarded on a competitive basis by the Cooperative State Research Service.